



United States
Department of
Agriculture

Forest
Service

Southern Region

1720 Peachtree Road NW
Atlanta, Georgia 30309

File Code: 1570
13-08-02-0009
Date: August 1, 2013

CERTIFIED MAIL R.R.R.

Jim Scheff
Kentucky Heartwood
P.O. Box 1486
Berea, KY 40403

Re: Appeal 13-08-02-0009 of Forest Supervisor Frank R. Beum's May 9, 2013,
Decision for the Bledsoe Coal Lease Project on the Redbird Ranger District

Dear Mr. Scheff:

According to the authority granted to me by 36 CFR 215, this letter contains my appeal decision on your appeal of the subject decision.

BACKGROUND

On May 9, 2013, Forest Supervisor Frank R. Beum signed the Decision for this project with the Notice of Decision being published in the Lexington Herald-Leader Newspaper on May 12, 2013. It has been verified that you provided comments during the 30-day Notice and Comment period required for standing to appeal in the proposed action. Therefore, you met the regulatory requirements at 36 CFR 215.13 for eligibility to file your appeal which was accepted on June 27, 2013.

The Forest Supervisor notified us that an offer was made on July 8, 2013, to informally resolve your issues with the Decision. As no resolution was reached we continued with our review of your appeal.

RECOMMENDATION OF APPEAL REVIEWING OFFICER (ARO)

I received the recommendation of the ARO that the Forest Supervisor's Decision be affirmed. The ARO's recommendation is based on the appeal issues and a review of the project record. A copy of the ARO recommendation is enclosed.

RELIEF REQUESTED

The appeal requests that the Decision be withdrawn.



CONCLUSION

My review of your appeal was conducted pursuant to, and in accordance with, 36 CFR 215.18 to ensure the analysis and decision are in compliance with applicable laws, regulations, and policy. I have reviewed the appeal record and the recommendation of the ARO, which includes a discussion of the issues that were raised in your appeal. Based on this review, I concur with the ARO's recommendation and am affirming the Forest Supervisor's May 9, 2013, Decision.

This constitutes the final administrative determination of the Department of Agriculture.

Sincerely,

/s/Mary A. Morris (for)
JEROME THOMAS
Appeal Deciding Officer
Deputy Regional Forester, Southern Region

Enclosure (ARO Recommendation)



File Code: 1570

Date: July 17, 2013

Route To:

Subject: ARO Recommendation Appeal 13-08-02-0009 Bledsoe Coal Lease Project
Redbird Ranger District, Daniel Boone NF in Kentucky

To: Appeal Deciding Officer

This letter constitutes my recommendation for the subject appeal filed by Jim Scheff of Kentucky Heartwood for the Bledsoe Coal Lease Project.

My review was conducted pursuant to 36 Code of Federal Regulations (CFR) 215. To ensure the analysis and decision are in compliance with applicable laws, regulations, and policies I have reviewed and considered the point raised by the appellant and the decision documentation submitted by the Forest Supervisor. My recommendation is based upon review of the Appeal and Project File, including but not limited to the Decision Notice and Finding of No Significant Impact (DN-FONSI), Environmental Assessment (EA) and Biological Evaluation (BE).

ISSUES

The Issues raised in this appeal that are within the scope of the review and meet the requirements of 36 CFR 215.14 are:

- Issue 1 Whether the identified purpose and need for the proposed project is arbitrary and capricious [Appeal, pp. 5-6];
- Issue 2 Whether the project analysis is arbitrary and capricious, particularly regarding economics and environmental effects[Appeal, pp. 6-10];
- Issue 3 Whether the Agency adequately considered indirect effects of reasonably foreseeable impacts [Appeal, p. 10].

DISCUSSION OF ISSUES

Issue 1 Whether the identified purpose and need for the proposed project is arbitrary and capricious.

The appellants contend (Appeal, pp. 5-6) "according to the EA, 'the Need (EA-1.3) for the project is to assist in addressing the national need for coal.' However, the EA fails to consider whether there actually is a national need for coal that ought to be met through providing the publicly-owned coal resources in the Bledsoe Coal Lease to the James River Coal Company or its subsidiaries. Nowhere does the EA address the well-documented fact that demand for coal, and Appalachian coal in particular, has dramatically fallen in recent years."



Purpose. The Environmental Assessment (EA, p. 1) states “The purpose of the project is to respond to an application to lease (KYES 053865) federal coal located in the Forest Service tract by Bledsoe Coal Leasing Company, and to evaluate the potential environmental consequences associated with mining that lease.” The EA (p. 4) identifies the regulatory authority of the Bureau of Land Management (BLM) to lease federal lands for coal extraction and (p. 5) identifies the decision to be made by the Forest Service as “Whether to consent to leasing by the BLM, under authority of the Mineral Leasing Act of 1920 and special coal lease stipulations, if any, that would be needed for the protection of non-mineral resources.” The Decision Notice (p. 1) addresses the purpose of the project by stating “I have decided to consent to the Bureau of Land Management’s (BLM) leasing of coal deposits underlying National Forest System land tract 3094Bd in Leslie County, Kentucky...By consenting to the BLM’s leasing of federal coal deposits, I am also consenting to underground mining consistent with the lease stipulations imposed for the protection of non-mineral resources.”

Need. The Decision Notice (DN, p. 1) and the Environmental Assessment (EA, p. 2) both state “The Mining and Minerals Policy Act of 1970 defines the federal government’s policy for minerals resource management as fostering and encouraging the development of economically sound and stable industries, and the orderly and economic development of domestic resources to help assure satisfaction of industrial, security and environmental needs.”

The EA (p. 2) states “The need for the project is to assist in addressing the national need for coal. The leasing of the federal coal would allow for the extraction of the private and federal coal resources in the most economic and efficient manner and maximize the recovery of both the private and federal coal.”

The EA (p. 1) also states “Coal leasing in this area helps meet the national growing demand for energy in the generation of electricity for residential and industrial uses. It also supports the President’s Energy Initiative and the 1984 Memorandum of Understanding on Energy Leasing.” The President’s Blueprint for a Secure Energy Future (March 2011, p. 3) acknowledges the continuing need for coal by stating “And beyond our efforts to reduce our dependence on oil, we must focus on expanding cleaner sources of electricity, including renewables like wind and solar, as well as clean coal, natural gas, and nuclear power.”

The EA (p. 2) states “Based on the Mining and Minerals Policy [Act] of 1970, the Forest Service developed its Minerals Program Policy to address its ecosystem management responsibility with regard to exploration, development, and production of mineral and energy resources and reclamation of those activities. The following specific Forest Service Minerals Program Policy objectives are relevant:

- Ensure that exploration, development, and production of mineral and energy resources are conducted in an environmentally sensitive manner and that these activities are integrated with the planning and management of other resources using the principles of ecosystem management.
- Maintain opportunities to access mineral and energy resources, which are important to sustain viable rural economies, and to contribute to the national defense and economic growth.

- Ensure that land disturbed by mineral and energy activities, both past and present, is reclaimed using the best scientific knowledge and principles and returned to other productive uses.”

With regards to the selected alternative (Alternative 1), the Decision Notice (DN, p. 8) states “Alternative 1, leasing of federal coal on the Daniel Boone National Forest, is consistent with the following goals found in the 2004 Land and Resource Management Plan for the Daniel Boone National Forest (Forest Plan):

Goal 9 – Provide mineral commodities for current and future generations commensurate with the need to sustain the long-term health and biological diversity of ecosystems (Forest Plan, page 2-15).

Goal 9.1 – Facilitate federal mineral development in a timely manner while protecting other resources (Forest Plan, page 2-15).”

The DN (p. 9) also states “This alternative will provide for the extraction of coal from beneath the Forest Service tract in a way that will adequately protect non-mineral resources. While protecting non-mineral resources, it will also allow for utilization of a needed resource, produce severance tax income for the local economy and assist in maintaining employment opportunities in the area.”

The appellants do not provide any references for their statement that “the demand for coal, and Appalachian coal in particular, has dramatically fallen in recent years.” In the Bledsoe Coal Lease Project Consideration of Comments (March 2013) document found in the project record, Comment 1-5 from one of the appellants states that the EA “ignore[s] the well-documented fact that demand for coal in the United States is dropping due to market forces (i.e., low natural gas prices, warm winter temperatures), with mines shut down and workers laid off as capacity exceeds demand. The EA appears to suggest the opposite is true, and the uninformed reader would wrongfully assume that there is a real need for federal coal to ‘meet the national growing demand for energy’ and address ‘the national need for coal.’ With information presented thus, no reasonably informed decision can be made.” The Forest Service response to this comment is “This comment reflects a disagreement with the stated purpose of and need for the proposed action. Over the next two years, the demand for coal is expected to increase. The US Energy Information Administration Short-Term Energy Outlook report USEIA (2013), Table 6, estimates that 892.6 million short tons were consumed in 2012 and predicts a demand of 912.1 million short tons for 2013 and 927.4 million short tons for 2013. As stated in Section 1.3 of the EA (Need) the Forest Service and BLM are required, under the Mining and Minerals Policy Act of 1970 to, “Facilitate orderly exploration, development and production of mineral resources within the National Forest System on lands open to these activities.”

The project record contains a report from the U.S. Energy Information Administration titled *Short-Term Energy Outlook (STEO) January 2013*, with forecasts for crude oil, natural gas, and coal for the next several years. For coal, the report (p. 9) states “EIA estimates coal consumption in the electric power sector totaled 829 million short tons (MMst) in 2012, the lowest amount since 1992. Lower natural gas prices paid by electric generators led to a significant increase in the share of natural gas-fired generation. Higher natural gas prices, coupled with slightly higher electricity demand, will lead to an increase in coal-fired generation over the forecast period.” The report further states “EIA estimates coal production declined by 6.3 percent in 2012 along with a

drop in domestic consumption. Coal production is expected to decline by a further 3.6 percent in 2013 as primary and secondary inventory draws combined with a small increase in coal imports meet a small consumption increase in 2013. Although EIA forecasts that coal consumption will remain flat and that inventories will stabilize in 2014, production is forecast to grow by 3 percent as coal exports rise.” In addition, the report (p. 9) states “EIA estimates coal exports totaled a record 124 MMst in 2012. Continuing economic weakness in Europe and lower international coal prices are expected to contribute to lower coal exports in 2013. U.S. metallurgical coal exports could be reduced if China removes an export tariff on Chinese coke, which steel producers import in lieu of metallurgical coal. EIA expects that changing market conditions, including weaker domestic demand for coal and higher coal inventories, will slow increases in coal prices and contribute to the shut-in of higher-cost production.” These statements from the U.S. Energy Information Administration indicate that coal production fluctuates and is dependent on a variety of factors including natural gas production and prices as well as the export markets.

Finding

I find that the purpose and need for this project is not arbitrary and capricious. Although the Bureau of Land Management has the authority to manage federal leasable mineral estates, the Forest Service has the authority for consent to lease National Forest System lands with federal leasable minerals. Therefore, for the Forest Service, the purpose of this project and environmental analysis is to respond to BLM with a consent decision for the Forest Service tract in question as provided for under the 1984 Memorandum of Understanding between the BLM and the Forest Service for Mineral Leasing. The need for the extraction of federal coal reserves is identified in the objectives of the Mining and Minerals Policy Act of 1970, the President’s Blueprint for a Secure Energy Future, the Forest Service Minerals Program Policy and the goals of the Land and Resource Management Plan for the Daniel Boone National Forest.

Issue 2 Whether the project analysis is arbitrary and capricious, particularly regarding economics and environmental effects.

The appellants contend (Appeal, p. 6) “Ostensibly positive economic impacts (which we address further below) are treated in the analysis as additive. Specifically, the BLM and Forest Service go to great length in the EA to show the economic importance of mining the coal in the Bledsoe Coal Lease as an economically additive endeavor....However, the environmental impacts associated with mining the coal are treated as non-additive; that is, the Forest Service asserts that there will be no changes locally or regionally in the amount of coal being processed, transported, burned, or disposed of, and therefore the environmental effects of such activities are not significant.” The appellants also contend (Appeal, p. 7) “It is illogical at best to assert that mining and utilizing the coal reserves in the Bledsoe Coal Lease will add dollars but not pollutants or other environmental effects.”

The appellants also contend (Appeal, p. 7) “The analysis is further flawed in the agencies’ arbitrary and biased treatment of economic data” and (Appeal, p. 10) “...the Forest Service made no effort to consider any negative economic costs associated with the project, including those from authoritative studies and the federal government.” The appellants state (Appeal, p. 10) “The

BLM and Forest Service have acted illegally by arbitrarily and capriciously refusing to consider real and negative economic impacts associated with approval of the Bledsoe Coal Lease, limiting the analysis to information that fits the agencies' desired and pre-determined result of showing erroneously that approval of the Bledsoe Coal Lease will result in a net positive economic impact."

The appellants reference the lack of consideration of other economic data, such as presented in *The Impact of Coal on the Kentucky State Budget* (MACED 2009), a report they submitted with their comments. They also reference the lack of consideration of monetized health impacts as discussed in Levy et al. (2009) and of Epstein et al. (2011) that presents a full cost accounting for the life cycle of coal; studies they also submitted with their comments.

The DN (p. 4) acknowledges "Some short-term impacts will affect some resources, including topography, groundwater quality, greenhouse gas emissions, plant and animal species. Potential adverse effects of this project are expected to be within thresholds that historically have not resulted in impacts that would be considered significant, even when considered separately from the beneficial effects that occur in conjunction with adverse effects."

The EA identifies (p. 21) and discusses (pp. 22-116) the beneficial and adverse environmental impacts on thirteen resource categories: topography and geologic; soils; vegetation; wildlife and fisheries; proposed, endangered, threatened and sensitive species; water; air; visuals and noise; socio-economic, coal recoverability and environmental justice; land use; cultural, historic and paleontological; transportation and recreation. According to the EA (p. 22) "The importance of impacts are determined by a set of significance criteria. These criteria are resource-specific and define the threshold, type or quantity of impact that would warrant species attention, such as special mitigation. The criteria are based on government regulatory standards and management directives, best available scientific documentation, previously prepared environmental documents, and/or the professional judgment of resource specialists."

The consideration of comments [project record document #90] explains that "The *Mountain Association for Community Economic Development* study includes costs calculated on a state-wide basis, in general for the coal industry, but does not provide meaningful data for evaluating costs relative to an individual operation. Concerning the Levy study, as stated in the response to Comment 1-1, because the types and location of specific facilities where the coal might be burned is not reasonably foreseeable, estimates of the effects of emissions from such unknown uses are speculative, and are outside of the scope of this EA".

Potential impacts are discussed for each of the 13 resource categories and then the possibilities for those impacts are estimated on a site-specific basis. Where applicable, the use of established methods and significance criteria to evaluate potential beneficial and negative impacts are documented throughout the environmental analysis:

Topography and Geologic Resources

Potential topographic impacts would be related to subsidence. Using established predictive techniques, the analysis acknowledges the possibility of subsidence occurring but conclude that

the surface strains will stay within the tolerable range for the local land use of woodlands, streams and wetlands (EA, pp. 38-45).

Potential geologic impacts are related to acid mine drainage (affecting groundwater quality) and the magnitude of these impacts depends on the chemical properties of the coal seam and overburden rocks being mined. Based on monitoring of water quality from previous mining within the coal seam, there are no significant acid-generating strata associated with this coal seam. Acid Base Accounting data (widely accepted protocols) and a geochemical characterization program (well-documented in literature) were used to predict post-mining drainage quality. Based on this information, site-specific geologic data, and the experience with other mines in the same coal seam, the results indicate that any acid produced would be neutralized by the surrounding rock, with no resultant acid mine drainage (EA, pp. 24-36).

Soils, Vegetation, Wildlife and Fisheries, Proposed Endangered, Threatened and Sensitive Species (PETS), Recreation, Visual Resources, Cultural Resources, Noise, Transportation

Since the proposed action involves no surface activities on National Forest System lands, there would be no impacts on soil erosion or productivity (EA, pp. 47-48). Underground mining would not affect vegetation since there is no surface disturbance (EA, p. 82). Potential impacts to wildlife and fisheries, and PETS are related to topographic, soil, water and vegetation impacts (EA, p. 90 and p. 97), which are none to minimal. The EA (p. 111) states the proposed action “would involve minimal subsidence, and no measureable impacts to access, ecological function, habitat, and safety of visitors to the USFS tract are anticipated. Therefore, no measurable impacts to recreation resources are anticipated.” Required archaeological and cultural resource surveys found “no measureable impacts to cultural, historical, and paleontological resources are anticipated if the Proposed Action is selected” (EA, p. 113). According to EPA and Federal Highway Administration studies, underground mining activities are not audible at the surface (EA, p. 114). Implementation of the proposed action would utilize existing transportation routes used by existing mining activities so there will be impacts to transportation (EA, p. 116)

Water

Potential impacts on groundwater quantity were based on a comprehensive groundwater study on a nearby mine with similar terrain, geology and the same coal seam; with a conclusion of no potential long-term adverse direct or indirect impacts to surface water or near surface aquifers (EA, p. 58). Water quality data from groundwater well monitoring within the vicinity and data from surface water monitoring points in the vicinity were analyzed (EA, pp. 48-72). Some indicators were above EPA National Secondary Drinking Water Regulation benchmarks but occurred in areas of no mining; therefore background levels are assumed to be naturally high (EA, p. 68). Underground mining would not produce sedimentation. Rock fracturing is not anticipated so no increases in dissolved solids are expected. No impacts from acid mine drainage are expected (EA, pp. 70-71).

Air

Greenhouse gas emissions were calculated from combustion sources but were well below CEQ thresholds, especially considering the timing of mining associated with this project when other mining activity in the vicinity has ended (EA, pp. 78-79). Methane was not considered a

potential impact since there undetectable levels of methane from the same coal seam at a nearby mine (EA, pp. 78-79).

Socio-economic Resources

This section of the EA used standard indicators to evaluate socio-economic impacts. The Forest Service Handbook (FSH) 1909.17, Chapter 20 states “Economic impact analysis estimates the total effects of a program or project and the distribution of those effects among all sectors of an economy. The analysis measures the effects primarily by changes in employment and income within the economy of the geographic area most affected by the program or project.”

Using 2010 U.S. Census data, the EA (p. 104) recognizes the local influence of coal mining by stating “In Leslie County, where mining is one of two dominant sectors with few other significant sectors, sustaining the sector is critical to the local economy. Consequently, coal is one of the most significant socio-economic resources in the area. Coal mining provides local jobs; private landowner royalty income; county, state, and federal tax, fee and royalty revenue; and business revenue.” The EA (p. 107) also identifies indirect impacts to local and regional businesses. The EA (pp. 105-106) compares the lower economic status of Leslie County (i.e. its median household income, per capita income, percentage of persons living below poverty level, available transportation network, tourism potential and unemployment) to other Kentucky counties and state-wide averages. Therefore, the positive economic benefits of coal mining for the local economy become more influential.

In order to determine the estimates of socio-economic impacts on income, the estimate of coal price was based as specific to the local area (Central Appalachian) as possible (Project Record, the U.S. Energy Information Administration, Coal News and Markets Report, October 2012).

With regard to the Mountain Association for Community Economic Development report (2009), the cost to the Kentucky state budget is beyond the scope of this project. There are many variables associated with the report’s estimates of revenues and expenditures that are not related to an individual operation as associated with this project.

The Levy et al. study (2009) monetizes health costs based on PM_{2.5}, SO₂, and NO_x emissions from coal-fired power plants. Similarly the Epstein et al. study (2011) monetized impacts due to climate change, health costs from emissions, fatalities, subsidies, and lost value of abandoned mine lands. As discussed in the following issue, these types of costs were determined not appropriate for environmental analysis for this project.

The Interagency Working Group on Social Cost of Coal of Carbon Technical Support Document (Appeal, p. 9) was not available for consideration before the decision was made. However, according to the Executive Summary provided by the appellants, it appears to be related to agency regulation-making, not project-level analysis.

Finding

I find that the project analysis was not arbitrary and capricious. Where applicable, the environmental consequences section of the EA used well documented and accepted methods and data. The potential negative and positive environmental impacts for all thirteen resource categories, including economic effects, were sufficiently identified for the scope of the project and were adequately disclosed to the decision-maker.

Issue 3 Whether the Agency adequately considered indirect effects of reasonably foreseeable impacts.

The appellant contends, "The scope of analysis and consideration of indirect effects are too narrow, and ignore significant reasonably foreseeable impacts" (Appeal, p. 2). Specifically, the appellant contends that "while the precise identify of the end-use facility for burning the coal, and thus specifics regarding emissions and disposal, may be speculative, the nature of the use, and therefore the nature of the effect, is not" (Appeal, p. 14). The appellant also contends "the Forest Service's refusal to consider coal combustion impacts associated with this coal lease is directly contrary to the approach taken by the Forest Service and BLM in conducting the NEPA review for other federal coal leases" (Appeal, p. 15).

As stated in the response to comments (Appeal Record Document #90):

"The Forest Service and the Bureau of Land Management (BLM) acknowledge that if the Bledsoe Coal Lease application is issued, a probable use of the mined coal could be coal combustion, which could introduce impacts relating to greenhouse gas emissions. It is reasonable to assume that coal combustion would result in emissions of pollutants. It is also likely that impacts from coal-burning facilities have been appropriately analyzed by the applicable permitting authority, such that any local or regional impacts from the combustion facilities would not exceed those already authorized. It would be possible to provide an estimate of air pollutant and greenhouse gas emissions associated with the burning of the mined coal at a specific facility. The use (combustion or otherwise), location of use, gasification, combustion or related technology applied to the coal, and its volumes and control technologies, are unknown, because the emission factors are site-specific and depend on the specific power plant at which it is burned. If the agencies decisions result in offering the lands for lease, the coal would be awarded following a competitive leasing process, and it is unknown where the mined coal would be taken for processing."

Additionally, the response to comments (Appeal Record Document # 90) stated the following which was and similar to the analyses cited by the appellant in the appeal (Appeal page 16):

"To provide context, the emission of 491,583.2 tons of CO₂ eq/ year, as cited in the comment, would constitute less than 0.009% of the annual GHG emissions in the United States. The net GHG emissions for the United States in 2010 (US EPA 2012) were estimated as 5,747.1 million metric tons CO₂ eq".

Finding

I find the decision adequately considered indirect effects and reasonably foreseeable actions.

RECOMMENDATION

After reviewing the project record and the issues raised by the appellant, I recommend that Forest Supervisor Frank R. Beum's May 9, 2013, Decision for the Bledsoe Coal Lease Project on the Redbird Ranger District, be affirmed.

/s/ William E. Taylor, Jr.

William E. Taylor, Jr.
Appeal Reviewing Officer
Acting Forest Supervisor